

1 **Q. (Reference Application Volume 2, Topsail Hydro Plant Refurbishment, page 1) It is**
2 **stated “The gate shaft is bent from repeated attempts to force gate closure.” What led**
3 **to the “repeated attempts to force gate closure” and is this the likely cause for the**
4 **need to replace the gate?**
5

6 A. The existing intake gate, associated gate slide and frame are deteriorated. The
7 deteriorated condition is what necessitates the replacement of the intake gate in 2021.
8

9 Newfoundland Power will defer the replacement of deteriorated equipment as long as the
10 equipment can continue to operate safely and reliably. However, continued operation of
11 deteriorated equipment can lead to further deterioration.
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13 The damage to the shaft resulted from the unavoidable need to operate the intake gate at
14 the Topsail plant to support recent work on the penstock. Because the deteriorated gate
15 does not seal well, repeated operation of the mechanism was required to ensure water
16 leakage was minimized.
17

18 The bend in the shaft was a *consequence* of the repeated operation of the already
19 deteriorated gate mechanism. It did not cause the deterioration.